

HUMAN GROWTH AND DEVELOPMENT

Infant/Toddler

NUTRITION FOR THE FIRST YEAR OF LIFE

Newborns, prepared only to suck from a nipple at birth, will by their first birthday, be sitting at the family table trying to finger-feed themselves with modified adult food. During this time, the foundations for life-long food habits and appetite control are established. To nurture this transition successfully, food and feeding styles must match both developmental and nutritional needs.

Current recommendations urge milk as the sole source of nourishment in the first four to six months and the primary source in the first year. There is no advantage or need to feed solid food before four to six months. The infant's digestive, kidney, and immune systems need this time to mature. Delaying the introduction of solid foods also reduces the risk of allergic responses and rejection of basic foods. Contrary to popular belief, solid foods do not encourage an infant to sleep through the night.

Depending on growth rate and maturation, at about four to six months of age, the infant's nutrient needs exceed the nutrients provided by his daily quota of coordination necessary to start eating solid foods. He sits up, his eyes follow the spoon, he opens his mouth in response, and his salivation and swallowing abilities increase.

Iron-fortified cereals are the ideal food at this time. They add calories for the growing baby along with all-important iron and vitamins that are low in milk.

A pleasant feeding experience with cereals depends greatly on dilution. Mix the cereal with milk to consistency that can be swallowed but not suckled from the spoon; progress to a consistency thick enough for some chewing practice. Rice cereal is usually started first since it is the least allergenic. Gradually introduce your baby to a variety of grains, wheat and barley.

At first, cereal will run out of baby's mouth; this reflects inexperience rather than rejection. He needs practice to develop coordination of tongue, so he can keep it in his mouth.

Having mastered the spoon challenge now focus on helping your infant appreciate and enjoy a variety of foods that provide the foundation of a good diet. Other basic foods groups - vegetables, fruits, and meats - are generally introduced about a month apart. Many parents start with vegetables since they may be more easily accepted if given before fruit. Vegetables are an adventure in color, flavor, and texture for the infant while adding vitamins and food fiber to the diet. Carrots are a popular starting food; follow with a variety of green, yellow, and white vegetables. Variety now may avoid later "vegetable battles."

Fruits are added next and quickly become favorites. Apples, peaches, bananas, pears, and apricots offer a good variety and add vitamins, minerals, food fiber, and natural sugars to the diet.

Meats, fish, and poultry are added last to the diet after fruits and vegetables are fed regularly. Nutrients are more concentrated in these foods and are better tolerated after six months of age. They provide important sources of protein, iron and vitamins. Fish and the white meat of chicken and turkey are good starters. Cottage cheese, tofu, and cooked, pureed legumes can also be introduced and egg yolks, used in moderation. Since egg whites cause more allergies than yolks, whole eggs are not usually given until after the first year.

As your infant gains experience, chopped and well-cooked table foods can be added. At about six to eight months he will reach for food and bring it to his mouth. With his "fisted" approach he can finger-feed appropriate, soft pieces of table food along with crackers, hard bread, and teething biscuits. Toward the end of the first year, he begins to grasp foods with his fingers and thumb; give him smaller pieces for practice. Along with these new skills, he will begin to drink from a cup with your help.

By now, that tiny bundle of joy of twelve months ago is a well-nourished individual ready to refine his eating skills and food habits. Bring on the birthday cake! Dad!

HUMAN GROWTH AND DEVELOPMENT

Typical Behavior

INFANCY

HANDOUT

BIRTH TO 1 MONTH

Likes to: Suckle
Listen to repeated soft sounds
Stare at movement and light
Be held and rocked

1 MONTH

Likes to: Listen to your voice
Look up and to the side
Hold things placed in their hands

Toys: A lullaby record
Mobile
Pictures on the walls

2 MONTHS

Likes to: Listen to musical sounds
Focus, especially on their hands
Reach and bat nearby objects
Smile

Toys: Music box or soft musical toys
Cuddle toys
Smiles

3 MONTHS

Likes to: Reach and feel with open hands
Grasp with two hands
Wave fists

Toys: Musical records
Rattle
Dangling toys

Typical Behavior (Continued)

4 MONTHS

Likes to: Grasp things and let go
Kick
Laugh
Make consonant sounds

Toys: Bells
Crib gym

5 MONTHS

Likes to: Shake, feel and bang things
Sit with support
Play Peek - a - Boo
Roll over

Toys: High chair with rubber suction toy
Play pen

6 MONTHS

Likes to: Shake, bang and throw things down
Gum objects
Recognize familiar faces

Toys: Household objects (plastic cups, spoons, pans)
Cloth ball
Squeaky toys
Teethers

7 MONTHS

Likes to: Sit alone
Use fingers and thumb
Notice cause and effect
Bite on their first tooth

Typical Behavior (Continued)

8 MONTHS

Likes to: Pivot on their stomachs
Throw toys/ objects
Look for toys they have dropped
Make vowel sounds

Toys: Space to pivot on their stomachs
Soft blocks
Jack-in-the-Box
Nested plastic cups

9 MONTHS

Likes to: Pull themselves up
Creep and place things where they want them
Say "da-da"
Play Pat-a-Cake

10 MONTHS

Likes to: Poke and prod with fingers
Put things into other things
Imitate sounds

Toys: Peg board
Cloth blocks
Motion toys

11 MONTHS

Likes to: Use their fingers
Lower themselves from standing
Drink from a cup
Mark on a paper

Toys: Pyramid discs
Large crayons
Clothes pins
Own drinking cup

Typical Behavior (Continued)

1 YEAR to 13 MONTHS

Likes to: Creep and cruise
 Use 1 or 2 words
 Use fingers
 Likes to be hugged

Toys: Cuddling toys
 Stacking tower

HUMAN GROWTH AND DEVELOPMENT

Basic Developmental Stages

Assignment

Teacher Notes

1. Reproduce the material "Most Common Age for Behavior to Appear" in this activity so that each student in class will receive a complete set of cards for sorting. The class may be divided into groups.
2. Cut cards on the broken lines and put them into separate envelopes for individual student use or into several envelopes for groups to use.
3. Distribute an envelope to each student or group of students.
4. Have the students sort the cards and place them under the appropriate age; e.g., birth to six months, six to twelve months, and so forth. The placement of cards by appropriate age can be recorded on butcher paper, ditto master, or chalkboard so that all students can see what others have done.
5. Have the students discuss the following:
 - a. Developmental stages that students agree belong to a particular age group
 - b. Developmental stages that students place in different age groups (Emphasize that individuals develop at various rates, causing the wide age variation within developmental stages.)

These cards to be cut and sorted according to age most common for behaviors to occur.

Smile	Sits up	Grabs toys
Grasps spoon	Picks up small objects	Starts to talk
Laughs	Shies away from strangers	Holds cup steady
Rolls over	Pulls self to a standing position	Feeds self
Recognizes mother's and fathers voices	Walks holding furniture	Walks
Turns toward sound	Finger feeds self	Picks up small objects with thumb and forefinger
Sleeps through the night usually	Realizes things still exist when out of sight	Climbs on low chairs and tables
Makes eye-to-eye contact	Says first word	Creeps upstairs

These cards to be cut and sorted according to age most common for behaviors to occur.

Negativity increases	Has a good imagination	Plays cooperatively with other children
Scribbles	Becomes toilet trained	Cuts with scissors
Puts two or more words together when speaking; starts to talk in short sentences	Climbs	Becomes very social
Remembers favorite books	Puts together puzzles of 10 to 25 pieces	Catches large ball
Slaps, fights, kicks, resists	Scribbles and starts to draw shapes	Puts together puzzles of 15 to 30 pieces
Plays beside other children-parallel play	Begins to dress self	Prints and recognizes some letters
Remembers and can follow two requests	Talks in short sentences	Starts to count
Eats with a spoon	Asks questions	Watches parents and role plays

HUMAN GROWTH AND DEVELOPMENT

Family Bonding

Teacher Notes

An infant's contact with the external environment is through the body. If the infant's physical needs are quickly met, if he or she is touched, talked to, played with, and given affection as needed, the infant then will come to sense the world and its people as safe and dependable. Bonding techniques can be learned through an awareness of their importance and through practice.

1. Give students two objects to touch, hold, and pass around the class. One object should be a soft, stuffed animal. The other should be an animal-like object made of wire mesh or sandpaper.
2. Ask the students to be aware of and to relate their feelings about each object.
 - a. Which animal would you want to hold again?
 - b. What emotions did you feel when holding the soft animal? The hard animal?
3. Show the film *Rockabye Baby*, a Time-Life film made in 1970 which presents experiments on the importance of touch.
4. Have each student write a definition of bonding.
5. Invite a new father to speak to the class as soon as possible after having shared the birth experience. Some new fathers will speak freely about the experience and their reactions and emotions as they saw and held their child (bonding) for the first time. If the father hesitates, be prepared with questions to help him teach the class about the advantages and disadvantages of the shared birth experience and the importance of bonding to a family.

Family Bonding (Continued)

Questions to ask the father:

- How did you feel about participating in the birth of your child?
 - Would you recommend this experience to other fathers?
 - How did you help your wife during the birth? Before the birth?
 - How did you feel when you first saw the baby?
 - How did you feel when you first held the baby?
 - When did you first feel like a family?
6. After the speaker leaves, have the students describe the bonding experience.
 7. Give the students the work sheet "Guidelines for Parents and Family: Help Develop a Good Self-Concept Through Early Bonding Techniques." Have the students ask their parents whether they remember doing the activities listed.

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Toys

TOY LAND

His little dog is covered with dust
and so are his little toy blocks
I bought them and paid an extravagant price.
So what does he play with? the box!

SUGGESTIONS TO HELP IN THE PURCHASE OF TOYS

1. Match the toy to the child.
2. Toys should encourage, not discourage creativity and imagination.
3. Consider your own interests only if you intend to use the toy with the child.
4. Compare prices.
5. Be sure the toy is safe. Look for sharp edges, points, exposed nails, straight pins or parts that can pinch.
6. Check assembly requirements. Is everything included? Batteries usually are not included. Do you have the necessary tools for assembly?
7. Is the toy workable and durable?
8. Will the toy grow with the child?
9. If the box is strapped shut, open it as soon as possible. Check for and count all the pieces and be sure that you have everything.

TOYS FOR BUILDING MUSCLES AND SKILLS

Blocks, small and large and hollow
Climbing apparatus - swings
Tricycles, wagons, cars - push and pull toys
Hammering toys and tools - large balls and bean bags

TOYS FOR STRETCHING THE MIND

Puzzles designed for age - beads to string
Put-together trains, trucks, nest blocks
Picture books
Appropriate games for each age can teach colors, counting, strategies, etc. as well as teaching children how to lose.

TOYS FOR PRETENDING

Table and chairs - housekeeping stuff and dishes
Washable dolls - furniture, etc.
Cuddle toys - dress-up clothes
Doll buggy - transportation toys
Play tents and houses

Toys (Continued)

TOYS FOR RELEASING FEELINGS

Sand and sand toys - punching toys
Pounding board - clay - Playdoh
Rocking chair, horse or boat - puppets
Musical instruments - drums, cymbals, bells - record player

ADDITIONAL TOYS FOR THE FOUR AND FIVE YEAR OLD

TOYS FOR CREATIVITY

Finger-paints - easel and paints and paper
Chalk and blackboard - crayons and plain paper
Collage materials - paste and scissors - glue

EYE-HAND COORDINATION ITEMS

Scissors - sewing cards - puzzles and more puzzles
Peg boards - Lite Brite

CONSTRUCTION TOYS

Leggo - Crystal Climbers
Lincoln Logs - Construction Straws
Table Blocks - Tinker Toys (more for the 5 year old child with experience)

QUIET TOYS

Books - Magazines and book club items
Tape recorder - records with record player

GAMES TO PLAY WITH THE CHILD

Hi Ho Cheery-O - Shutes and Ladders
Memory - Candyland
Ants in the Pants - Dominos
Card Games - Fish, War, Old Maid, etc.
Cootie - Lotto

Games need an adult to help at first. Reading the rules, sharing, taking turns and losing are all learned, and children learn best by watching.

Toys (Continued)

TOYS FOR THE IMAGINATION

Puppets - purchased and homemade
Have old clothes, capes, etc. to play with.
Doll House Equipment, old lunch boxes

A BOX MARKED:

Christmas with old ribbon, wrapping paper, plastic ornaments, etc.

Post Office with magazine offer stamps, envelopes, a pencil, crayons, paper, junk mail, mail bag, etc.

Beauty Shop with curlers, cape, hair brush, etc.

Restaurant with children's menus, pad to take orders on, pencil, paper plates, cups, favor cups, fake food, old MacDonalds food boxes, etc.

Doctor with gauze , band-aids, sling (made out of an old sheet), toy thermometer, pad for prescriptions, etc.

Can you think of some box kits that can be added to the list?

It is important to have a place designated to store the child's toys. Label with pictures and words as they grow. This will encourage the child to help pick up. It is best for children to have a few toys from each category rather than all the toys from one category - balance is important.

Children can have too many toys. If the room is always a mess, try limiting the number of toys. Label some toys (with pictures) and put them up high where children can see them, but not reach them. Then when the child wants a toy taken down you can trade and ask the child to pick which toy goes up. Many children need a room with less stuff and more space. Children often have so much that they can't see individual toys (Lack of ability to visually discriminate).